John H. Glenn Research Center Lewis Field Cleveland, OH 44135-3191



ATTACHMENT A

STATEMENT OF WORK (SOW)

FOR

GLENN MULTIPLE AWARD CONSTRUCTION CONTRACT (GMACC)

AT

THE NATIONAL AERONAUTICS AND SPACE ADMINISTRATION JOHN H. GLENN RESEARCH CENTER

AT

LEWIS FIELD AND PLUM BROOK STATION

May 13, 2014

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1) Purpose

The purpose of this Glenn Multiple Award Construction Contract (GMACC) is to provide an expedited means to implement construction activities at the Glenn Research Center (GRC). The GRC Facilities, Test, and Manufacturing Directorate, Facilities Division, Project Management Branch is responsible for managing construction activities.

2) Description

The work described below is for implementation of new construction, rehabilitation, and modification of facilities and infrastructure at GRC, Lewis Field in Cleveland, Ohio and Plum Brook Station in Sandusky, Ohio.

3) Typical Work

The contract work effort will be comprised of two types of construction tasks issued as task orders in accordance with the terms of the contract: (a) "Standard Tasks" are defined as work valued from \$0 to \$1,000,000 and (b) "Construction of Facilities Tasks" are defined as work which is valued over \$1,000,000.

The majority of construction tasks are Standard Tasks. Approximately 50 tasks are performed through the GMACC on an annual basis.

4) Work Scope

All work under this contract shall be completed in compliance with all applicable building codes, Federal, state, and local safety, health, and environmental regulations, Presidential executive orders, NASA policies, the NASA Glenn Environmental Programs Manual, the NASA Glenn Occupational Health Program Manual, and the NASA Glenn Safety Manual. The NASA Glenn Manuals can be found on the following website: http://smad-ext.grc.nasa.gov/shed/index.html

The Contractor shall furnish all labor, materials, equipment, management, and safety personnel necessary to meet the requirements of this Statement of Work (SOW). The work shall include Structural, Civil, Mechanical, Electrical, Environmental, Architectural, and other specialized services.

Structural

The work activities in this area shall include, but are not limited to, fabrication, rigging, and installation of structural steel, wood, or engineered products.

Civil

The work activities in this area shall include, but are not limited to, underground infrastructure installation, site development, soil removal, and soil relocation.

Mechanical

The work activities in this area shall include, but are not limited to, HVAC systems, plumbing systems, gas systems, high and low pressure steam systems.

Electrical

The work activities in this area shall include, but are not limited to, high voltage, low voltage, substations, motors, and process control systems.

Environmental

The work activities in this area shall include, but are not limited to, hazard assessments, hazardous soil removal, and asbestos, mercury, and lead abatement.

Architectural

The work activities shall include, but are not limited to, carpentry, finishes, roofing and cabinetry.

• Other Specialized Services

Specialized services shall include, but are not limited to, cryogenic, vacuum, acoustical systems, and other construction related work activities not otherwise mentioned above.

Design-Build

Work activities shall include Architectural and Engineering services to complete design efforts in support of projects to be delivered as design/build projects. The intent is to allow for quick turnaround from concept to completion. Task orders for design/build projects will, at a minimum, require the contractor to submit a written narrative describing their understanding of the scope and qualifications of the proposed engineering team.

5) Developmental Partnership

A major goal of the GMACC is for the Contractor and the Government to work as an integrated team to develop a streamlined process that is flexible while ensuring the safe and successful accomplishment of work activities. The NASA team is comprised of civil service personnel and other support service contractors with the overall goal of accomplishing the assigned task. A long term partnership is integral to the successful completion of tasks.

6) On-Site Presence

The Contractor shall provide a full time on-site Superintendent during the performance of active tasks under the contract. The Government, at their discretion, reserves the right to require a full time dedicated superintendent on any specific task. The requirement for a dedicated superintendent will be specified in the construction task order. Concurrent tasks active at both Lewis Field and Plum Brook Station will require a separate superintendent at both locations. The site superintendent shall have OSHA 30 hour training. When the Safety Officer is not onsite, the Site Superintendent shall be responsible for safety and health.

The Safety Officer shall be required to be on-site at task kick-off, for weekly safety reviews and talks, during critical task activities, to respond to emergency situations within a two (2) hour period and to perform audits of active work three times a week. See section G, of the Request for Proposal (RFP), for the Safety and Health Officer qualifications. The Safety Officer shall develop the task specific Health and Safety Plan. A daily documented site safety inspection shall be conducted. Any safety findings that are identified shall be documented and tracked to resolution.

The Government is not requiring a work trailer be established. The Contractor may establish a work trailer only during active tasks. The Government will provide access to an adequate electrical connection for a work site trailer, if available, and cover the cost of the electricity. This electrical connection shall be the only utility supplied by the Government. Trailer service costs shall be the responsibility of the Contractor. The Contractor shall request permits from the Contracting Officer's Representative (COR) to place the work trailer and make the electrical connection. The work trailer shall be neat in appearance, current to existing codes and shall be maintained by the Contractor. The work trailer shall be kept free from trash and debris. Periodic inspections will be performed by the COR to assure the Government supplied space and Contractor furnished trailer are kept orderly and uncluttered. Access to the Contractor furnished work trailer shall be Monday through Friday, 6:00 a.m. to 6:00 p.m, excluding days that the Center is closed.

7) Implementation

The following is an overview of the procedures normally used by the Government to request, select, and authorize all work activity.

- The Project Management Branch will receive a work request for construction services from an internal GRC customer.
- The COR will assign a Construction Management Support Specialist (CMSS) to act as a point of contact for the task.
- A project number will be assigned and the COR will initiate a Form 321 letter, see Attachment A.2, and invite the Contractor to submit a Construction Project Plan (CPP) Proposal.
- To assist in the preparation of the CPP Proposal, a site showing will be held by the Government to provide an understanding of the scope of work, schedule development, implementation of the work, and closeout requirements.
- The Contractor will then prepare a CPP Proposal, see Attachment A.2, and submit the CPP as defined by the 321 Letter to the COR for review and evaluation.

The following documents are part of the CCP Proposal preparation:

- Construction Cost Estimate (CCE), see Attachment A.3
- o Sample Task Pricing Schedule, see Attachment A.4
- Health and Safety Plan (HASP) Checklist, see Attachment A.5
- o Environmental Compliance Plan (ECP) Waste Questionnaire, see Attachment A.6
- The Government will review the CPP Proposal and select a contractor to perform the task based on best value selection criteria.
- The Government will issue a NASA Form OF 347, see Attachment A.7, which authorizes
 the selected contractor to begin preconstruction activities, such as, design services,
 submittals, permits, schedules, purchase approved equipment and material, and to
 develop the Health and Safety Plan.
- A notice to proceed will be issued after the Health and Safety Plan is approved.

No work shall begin on any task without an issued Task Order (NASA Form OF 347) signed by the Contracting Officer. No field work shall begin without a Notice to Proceed letter signed by the COR.

7.1 Construction Project Plan Proposal

The CPP Proposal shall be prepared by the Contractor and shall include detailed construction cost, implementation plan, submittal schedule, construction schedule, demonstration of subcontractor competition, a HASP checklist, ECP Waste Questionnaire, and any additional best value selection criteria defined per task.

The design and construction costs shall include all anticipated expenses including: direct labor hours and dollars for design and construction management functions such as: development of design documents, construction supervision, construction safety, procurement, performance, payment bonds, and the preparation of as-built drawings; contractor and subcontractor labor hours by trade; equipment and materials costs; all indirect costs; markups and handling costs; and profit.

The Overhead (O/H), Profit percentages and any additional indirect rates as well as anticipated key employees labor rates (excluding labor rates regulated by Davis Bacon rates) identified at the award of a task will be used as a not to exceed rate during the life of the task to support future change order or new work negotiations. (Key employees shall include, but are not limited to, project manager, clerical, superintendent, and safety officer.)

The bid schedule shall be completed in full by the Contractor as part of the CCP Proposal.

The site specific Health and Safety Plan (HASP) and/or HASP Checklist shall identify potential hazards and the means by which they will be controlled, eliminated, and monitored. The HASP shall be reviewed by the Facilities Division Safety Representative before being submitted to the GRC Safety, Health, and Environmental Management Offices for approval. The approved HASP shall be maintained by the Contractor and kept at the job site for the duration of the task and all workers assigned to the task shall be required to read and understand the contents of the HASP before commencing any work activities. To document that the workers are made aware of all the contents contained in the HASP each worker is required to place their signature on the HASP document indicating that they have read and understand the hazards identified and the means to control those hazards. The Notice to Proceed with Construction will not be given until the Contractor has an approved HASP.

The submittal schedule shall identify shop drawings and technical submittals required by the specifications and drawings with the Contractor's anticipated submission date.

The construction schedule shall be submitted in a Gantt chart format and shall include critical milestone dates for necessary interfaces with the Government, and a line item showing completion, which includes punchlist, clean up and submission of as-built drawings and Operation and Maintenance (O&M) manuals.

The integrated implementation plan shall detail the technical approach to implement and complete the task. **Note:** Innovative or alternate approaches to completing tasks are part of the best value selection criteria. For purposes of the Seed Tasks, Contractor shall provide a Project Management Approach which shall include, but not limited to, Teaming, Partners, and Task Execution Personnel, as part of the Implementation Plan.

Demonstration of subcontractor competition shall occur on every task and be accomplished by attaching a copy of the detailed subcontractor's proposals to the CPP Proposal. The CPP Proposal shall also list the names of the companies that were invited to submit a subcontract price along with their proposal or declination. The selected subcontractor shall be identified along with the range of quotes received from all subcontractors from low to high.

The ECP Waste Questionnaire shall identify potential environmental hazards and the quantities by which they are generated. The questionnaire shall be reviewed and approved by the GRC Environmental Program Manager prior to the generation of the waste.

7.2 Preconstruction Meeting

After contractor selection, and Government issuance of an OF 347, a Preconstruction meeting will be initiated by the Government. The Contractor, including any key subcontractors shall attend the preconstruction meeting. At the conclusion of the meeting, authorization will be given to the Contractor to commence the submittal process for planned equipment and material purchases, and to begin the development of the site specific Health and Safety Plan.

7.3 Notice to Proceed with Construction

In order to receive a Construction Notice to Proceed the following items must be addressed:

The Government must receive a letter from the Contractor certifying that the staff requirements (names of the site superintendent, safety officer, competent person(s) as required, etc.) for a task are met.

After the approval of the Contractor's Health and Safety Plan, the COR will issue a Notice to Proceed to begin construction. The Contractor shall provide the necessary labor, materials, and equipment to implement the work in accordance with the submitted CPP Proposal or as amended by any contact modifications. The Contractor shall provide construction supervision for all aspects of the construction activities including coordination with representatives from key GRC organizations.

7.4 Performance

During the performance of each task order the Contractor shall:

Assure that all costs incurred for each task order do not exceed the amount authorized by the 347. The Contractor shall immediately notify the COR or the CMSS if the task order may exceed the amount authorized by 347 and submit an explanation and a plan for corrective action as early as possible during task order execution.

The Contractor shall track all schedule milestone dates for each task and ensure that all schedule changes are reported monthly in an updated Gantt chart format to the NASA project team. The Contractor shall immediately notify the COR of any projected schedule changes, and submit an explanation and a plan for corrective action. Construction Schedules shall be considered submittals of the task.

The Government reserves the right to enforce corrective measures at no additional cost in order to assure successful Contractor task performance. Corrective measures such as, but not limited to, daily meetings, increased project or safety procedures, inspections and/or documentation, and removal of employees for violations of NASA procedures, will be utilized to focus the efforts

and completion of the subject work.

7.5 Status and Reporting

7.5.1 Daily Reports

For all tasks, the Contractor shall submit to the CMSS a daily inspection report describing the daily activities for each task. Included in the report shall be the total on-site workforce identified by trade (e.g. 1 Superintendent, 1 Electrical Foreman, 2 Journeyman Electricians, 1 Electrical Apprentice etc.) Include also in the report the progress of work, hours worked, any delays, interference or schedule conflicts, safety concerns or violations, equipment used, material received or shortages, and any visitors.

7.5.2 Accidents and Safety Violations

The Contractor shall report to the COR, as soon as possible, but within one (1) hour, any mishaps, incidents or close calls, as defined by the Glenn Safety Manual, that occur during operations at the Center involving personnel or contractors under your authority.

NASA reserves the right to remove any contractor employee for noncompliance with Center regulations.

8) Emergency Requirements

In case of an emergency such as a system critical impact, imminent danger, building or structure damage, or an environmental release the Contractor shall respond to the emergency, as directed by the Contracting Officer, COR or NASA Official. A task order, contract modification, or negotiated settlement shall be determined by the Contracting Officer.

9) Quality Control

The Contractor shall ensure effective quality control for all ongoing work activity.

9.1 Subcontract Management

The Contractor shall be responsible for effectively managing all work activity including that of a subcontractor, teaming partner, or vendor. The Contractor shall effectively manage purchasing sources, including that of any subcontractor, to ensure that each material, parts, equipment, and components meets specifications and quality requirements.

1.2 Contractor's Quality Inspections and Testing

The Contractor shall implement a robust quality inspections and testing process so all work activities conform to requirements and specifications. Documentation shall indicate control through records of inspections and tests. When appropriate, the Contractor is authorized to utilize an independent testing laboratory to accomplish inspection and testing.

10) Government Quality Inspection

Work performed by the Contractor shall be subject to inspection by the Government. Changes to specifications or drawings **ARE NOT** permitted without written authorization of the Contracting Officer's Representative.

When inspections reveal that corrective measures are required, additional time will be allowed for reinspection by the Government. Any cost incurred shall be at the Contractor's expense.

The Government shall be notified prior to concealing any work such as mechanical and electrical components behind drywall, and back filling or encasing of any underground utilities in order to inspect the work. Failure to provide such notification shall require removing concealed or backfill material to inspect the work and record survey and/or as-built data. Any cost incurred shall be at the Contractor's expense.

All tasks are subject to continuous evaluation, review, and verification by the CMSS or COR. The Contractor shall be notified in writing of any noncompliance area and shall be given three (3) days to correct identified deficiencies.

The Government reserves the right to conduct offsite inspections.

11) Closeout and Documentation

The Contractor shall participate in the Acceptance and Turnover Process. This process is implemented as a checklist to ensure major activities are complete and ready for turnover to the responsible Government Representative. The Contractor shall ensure that punch list items are complete, conduct training as applicable, perform operational testing, submit operational and maintenance manuals and red lined as-built drawings prior to the scheduled final walk-through.

At the completion of each task, the Contractor Representative and the Government CMSS shall meet to discuss and evaluate the Contractor's performance. The purpose of this meeting is to allow the CMSS and the Contractor Representative to discuss and measure schedule and cost growth along with how well the Contractor performed in the elements identified on the task.

At the end of each task, the Contractor shall provide the following closeout documentation: complete cost data, final drawings, red lined as-built drawings, reports (i.e. inspection reports, quality control reports, daily site reports etc.), approved shop drawings, O&M Manuals, and other supporting documents that were required to perform the task no later than 30 days from task final acceptance.

After task final acceptance and receipt of closeout documentation by the Government, submit final billing to the COR within 30 days.

A.1 - LIST OF ACRONYMS

American Industrial Hygiene Association (AIHA)

Asbestos Containing Material (ACM)

Best Value Selection (BVS)

Central Contractor Registration (CCR)

Code of Federal Regulations (CFR)

Commercially available Off-The-Shelf (COTS)

Concrete, Construction, and Demolition Debris (CC&D)

Construction Cost Estimate (CCE)

Construction Management Support Specialist (CMSS)

Construction Project Plan (CPP)

Contracting Officer's Representative (COR)

Data Universal Numbering System (DUNS)

Defense Priorities and Allocations System (DPAS)

Department Of Defense (DOD)

Electronic Funds Transfer (EFT)

Environmental Compliance Plan (ECP)

Environmental Protection Agency (EPA)

Federal Acquisition Regulation (FAR)

Federal Awardee Performance and Integrity Information System (FAPIIS)

Free Trade Agreement (FTA)

Glenn Multiple Award Construction Contract (GMACC)

Glenn Research Center (GRC)

Government Furnished Property (GFP)

Health and Safety Plan (HASP)

Heating, Ventilation, and Air Conditioning (HVAC)

Indefinite Delivery/Indefinite Quantity (IDIQ)

Job Hazard Analysis (JHA)

NASA FAR Supplement (NFS)

National Aeronautics and Space Administration (NASA)

North American Industry Classification System (NAICS)

Occupational Safety and Health Administration (OSHA)

Online Representations and Certifications Application (ORCA)

Operation and Maintenance (O&M)

Past Performance Information Retrieval System (PPIRS)

Project Manager (PM)

Request for Proposal (RFP)

Resource Conservation Recovery Act (RCRA)

Service Disabled Veteran Owned Small Business (SDVOSB)

Small Business Administration (SBA)

Statement Of Objectives (SOO)

Statement of Work (SOW)

Storm Water Pollution Protection Plan (SWPPP)

System for Award Management (SAM)

To Be Determined (TBD)

Toxic Substance Control Act (TSCA)

United States Code (USC)

United States Department of Agriculture (USDA)

Women Owned Small Business (WOSB)

World Trade Organization Government Procurement Agreement (WTO GPA)

A.2 – CONSTRUCTION PROJECT PLAN (321 LETTER)

National Aeronautics and Space Administration

John H. Glenn Research Center Lewis Field Cleveland, OH 44135-3191



Date

Reply to Attn of: FDP

Contractor Attn: President Street Address City, State, Zip

Subject: Project Order Number: Project Name, Glenn Research Center

An invitation is extended to your firm to submit a Construction Project Plan (CPP) Proposal for the subject project order number. (Project Manager Name) is the assigned Project Manager (PM) for this project.

1. A proposal meeting is scheduled for (Local Time) on XX/XX/XXXX at (detail location) at (Lewis Field or Plum Brook), Glenn Research Center.

All interested offerors are urged and expected to inspect the site where construction services are to be performed and to satisfy themselves regarding all general and local conditions that may affect the cost of contract performance, to the extent that the information is reasonably obtainable. In no event shall failure to inspect the site constitute grounds to a claim after contract award.

The site will **NOT BE OPEN FOR INSPECTION AT ANY OTHER TIME**, unless authorized by amendment to this solicitation. All interested offerors are requested to sign-in at the main gate at least 30 minutes prior to the site showing.

2. Pre-Bid Questions:

All pre-bid questions must be submitted <u>in writing</u> to the TR no later than XX/XX/XXXX @ **(Local Time)**.

3. CPP Proposal Content:

- a. Company Cover Letter
- b. Detailed Construction Cost Estimate (include total construction cost)
- c. Completion of the attached Bid Schedule Form.
- d. Site Specific Health and Safety Plan Checklist
- e. Submittal Schedule
- f. Construction Schedule
- g. Implementation Plan (identify challenges or concerns, including environmental issues)
- h. Demonstration of Subcontractor Competition
- i. Payment and Performance Bonds for all tasks greater then \$100,000.
- j. Waste Questionnaire
- k. Acknowledgement of Addendums

4. Additional Considerations:

- a. Contractors shall submit bonds, with their CPP Proposal, in accordance with clause, Bonding Requirements. Bonds are required on all tasks that exceed \$150,000.00. The cost of these bonds shall be included in your cost breakdown. The penal sum of the payment bond and performance bond shall be 100 percent of the total task order amount.
- b. Contractor's CPP Proposal shall be valid for ninety (90) calendar days for Government acceptance after the date offers are due.

- c. All work on this project shall be complete by XX/XX/XXXX.
- 5. **CPP Proposal Submission:** CPP Proposal shall be submitted to the COTR by XX/XX/XXXX @ **(Local Time)**.

		NASA CONTRACT NO.					
CONTRACT TASK ORD	ER	CONTRACTOR					
National Aeronautics and Space Administration Glenn Research Center 21000 Brookpark Road Cleveland, Ohio 44135-3191		TAGK OPPED NO					
		TASK ORDER NO.					
		TASK ORDER NO. AMENDMENT NO.					
TASK ORDER TITLE		DATE					
TASK ORDER SPECIFICATIONS		PAGE 1 OF					
SEE ATTA	ACHED STATI	EMENT OF WORK					
SEE ATTA	ACHED STATI	EMENT OF WORK					
TASK ORDER SCHEDULED COMPLETION							
NASA CONTRACTING OFFICER SIGNATURE		CONTRACTOR'S SIGNATURE OF ACKNOWLEDGEMENT					
NAME	DATE	NAME	DATE				

NASA-C-321 (10-88)

A.3 – CONSTRUCTION COST ESTIMATE

	Proje	I VASA ect Nam	Date: .e er		
SPEC S LABOR DESCRIPTION		<u>HOURS</u>	RATE		<u>AMOUNT</u>
Laborer Cleanup and S Quality	ject Management Supervision Asst. P.M./ P.E. afety Delineation Control Manager Administrative Safety AL DIRECT CO			\$	
Howard and the second second second second				3	AA (OLDUR
SPEC S MATERIAL\EQUIP DESCRIPTION	<u>Name</u>	<u>QTY</u>			<u>AMOUNT</u>
				\$	-
TOTAL	L MATERIAL CO	OST		\$	-
SPECS SUBCONTRACT DESCRIPTION	NAME				AMOUNT
Tota	l Subcontract Co		TAL MATERIAL COC	\$	_
		TOTAL	TAL MATERIAL COS SUBCONTRACT COS SUB-TOTA O/1 Prof TOTAL DIRECT COS	T L H It	
		тоты	BONDING Base Bid PRICE	-	
		⊕):			

A.4 - SAMPLE TASK PRICING SCHEDULE

PROJECT NAME

Project Order Number

RFP SCHEDULE

The Task Pricing Schedule shall be completed by the Contractor and will be considered a part of the Construction Project Plan (CPP) Proposal.

This schedule reflects the fixed price amount for furnishing all services, labor, and material for all work associated with the "Project Name" project (Project Order Number) as depicted on project drawings dated XX/XX/XXXX and the project specifications dated XX/XX/XXXX.

BASE PRICE

Base bid consists of all labor, equipment, and materials to perform work associated with project SOW, parts list and specifications.
\$
TOTAL FIRM FIXED PRICE
Total firm fixed price of Base and ALL Options: (Amount in Words):

DETERMINATION OF BEST VALUE

The Government will evaluate offers and make the determination of the BEST VALUE offer on the basis of the submitted CPP items.

COMMENCEMENT, PROSECUTION, AND COMPLETION OF WORK

The Contractor shall be required to (a) commence work under this contract within ten (10) calendar days after the date the Contractor receives the notice to proceed, (b) prosecute the work diligently, and (c) complete the entire work ready for use not later than XX/XX/XXXX.

A.5 – HASP CHECKLIST



Contractor Safety Submittal Requirements

	Project Name: Project ID #:				
	Prepared By: Date:				
	Contractor Nam	e:			
			SAFETY INFORMATION		
_	Health Plan)	·	ecked items shall be included i	·	·
	Accident Report Adverse Weather Breathing Air Sac Clothing Confined Space Controlled Areas Construction Sit Cranes & Lifting Operations Demolition Drinking Water Drug Free Work Electrical Safety Emergency Med Procedure EPD/DS Equipment Excavation Evacuation Fall Protection Fire Protection Fire Protection Fire Protection Fire Aid Medica Hand Tools Hazard Commu Hazardous Subs Asbestos. Hazard	er Lafety	□Silica, □ Lead) Hearing Conservation Heat Stress Hot Work Permit Housekeeping Industrial Hygiene Inspections Ladders & Stairs Lockout/Tagout Mobile Equipment Rollover Protection Occupational Health Facility Painting & Abrasive Blasting Personal Protective Equipment Radiation Protection Respiratory Protection Safety Meetings Safety Plans Safety Systems Sanitary Conditions & Facility Scaffolding Temporary Structures Thrust Blocks Training Certifications Vehicle Operations Vehicle Mounted Elevating a	☐ Welding ☐ Work Z	g Work Platforms g & Cutting Operations one Traffic Safety

PERMITS/PLANS TO BE SUBMITTED								
	Confined Space Crane Permit Excavation Fall Protection Hot Work Lift Plan Radiation Plan SWPPO Weld Request							
OTHER SAFETY INFORMATION OR COMMENTS								

<u>A.6 – ECP WASTE QUESTIONNAIRE</u>

ENVIRONMENTAL COMPLIANCE PLAN (ECP) WASTE QUESTIONNAIRE

Project Name:	Con	tract Number:	
Project Location:			
Description:			
Project Environmental Impact Desc	ription:		
Project Schedule:			
Project Points of Contact:			
NASA Project Manager:		Phone:	
Inspector:		Phone:	
Quality Assurance: Prime Contractor:		Phone: Phone:	
Time Contractor.		Thone.	
APPROVALS:			
Toxic Substance Control Act (TSCA)		
Print Name:	Sign:	Date:	
Resource Conservation Recov	ery Act (RCRA)		
Print Name:	Sign	Date	

ENVIRONMENTAL COMPLIANCE PLAN (ECP) WASTE QUESTIONAIRE

The questionnaire below is an estimate of the quantity of waste that is to be generated if you were to be awarded the task. It is to be included in your CPP for the task.

Environmental Media to be impacted by this project:

Toxic Substance Control Act (TSCA)
Asbestos (ACM)
Friable
 Non-Friable
Polychlorinated Biphenyls (PCB's)
Resource Conservation Recovery Act (RCRA)

Resource Conservation Recovery Act

Project Derived Solid Waste Management Plan

The following Project Derived Solid Waste Management Plan is designed to ensure compliance of U.S. Environmental Protection Agency (USEPA), Ohio Environmental Protection Agency (OEPA), local regulations, and NASA policy.

A Non-Solid Waste Manifest can be obtained from Waste Management for materials such as asphalt, concrete, construction and demolition debris (C&DD), etc. (see below for more). A list of licensed C&DD facilities can be found on the OEPA web site. Please note that even though a facility may be licensed this does not necessarily mean that they are approved.

Solid Waste is defined in 40 CFR 261.2. Typical materials generated onsite and treated as solid waste are: asbestos (non-friable and friable) from gaskets, insulation, transite panels, etc. and treated lumber used in construction. Non-hazardous solid waste generated onsite will need analytical data, waste characterization (profile), site acceptance, and a copy of the proposed Uniform Non-Hazardous Waste Manifest four weeks prior to shipment. A list of licensed Solid Waste facilities can be found on the OEPA web site. Please note that even though a facility may be licensed this does not necessarily mean that they are approved.

Hazardous waste is defined in 40 CFR 261.3. To ensure compliance, a separate written procedure may be required when generating hazardous waste. Examples of hazardous waste generated onsite include empty containers with residues, spent solvents, PPE, paint brushes, rollers, drop cloths, and off-spec chemicals. Hazardous waste generated onsite will need analytical data (MSDS in case of spent product containers), waste characterization (profile) and Land Disposal Restriction Forms (LDR), site acceptance, and a copy of the proposed Uniform Hazardous Waste Manifest four weeks prior to shipment. Shipments of hazardous waste must arrive at their destination the same day they leave GRC. Please schedule shipments with receiving facilities accordingly.

NOTE: Required documentation must be submitted to Waste Management Program Office (10) working days prior to scheduled off-site shipment date; materials to be delivered to Central Chemical Storage Facility (CCSF), Building 215, must be scheduled with Waste Management Program personnel in advance.

Solid Waste to be generated:

	es NASA GRC Non- equire GRC Soil Dete			include approx	kimate v	volumes and/or pound	ds,
50115 10	equite one bon bete		cernst.				
	Asphalt	pound	ds	cubic yards			
	Cⅅ	pound	ds	cubic yards			
	Concrete	pound	ds	cubic yards			
	Metal	pound	ds	cubic yards			
	Non-treated wood	pound	ds	cubic yards			
	Soil	pound	ds	cubic yards			
	Stone	pound	ds	cubic yards			
Doguir	es analytical data, wa	sta aborostari	zation si	ta accontance o	nd Unif	form Non Unzardous	7
	es anaryticai data, wa Manifest:	ste characteri	zanon, si	ie acceptance a	ına Omi	OIIII INOII-IIazaiuous	•
W asic	Asbestos Containing	Material (des	ceriba).		pounds	s cubic yards	
H	Solid waste (trash)	pound		cubic yards	poullus	s cubic yards	
H	Treated wood	-					
	Treated wood	pound	us	cubic yards			
Requir	es analytical data, wa	ste characteri	zation, si	te accentance a	and Unif	form Hazardous Was	ste
Manife	_			r			
Describ							
	Hazardous waste	pound	ds	cubic yards			
Manag	ed On-site						
	Cardboard	pounds	cubic y	ards			
	Lamps	ea	J				
	Ballasts	ea					
	Batteries	ea					
	Hazardous Materials	(describe):		pound	S	cubic yards	

Hazardous waste generated and stored at the construction site prior to off-site shipment or delivery to the Central Chemical Storage Facility, Building 215, must comply with all applicable RCRA requirements concerning hazardous waste (40 CFR 261).

A.7 - SAMPLE TASK AWARD FORM (OF-347)

		ORDER	FOR SUPPLII	ES OR SE	RVICES			PAGE	OF	PAGES
IMPORTANT	: Mark all packag	ges and papers with	contract and/or	order numbe	ers.					
1. DATE OF ORE	DER	2. CONTRACT NO.	(If any)				6. SHIP TO:	•		
2			THE STATE OF THE S	a. NAME OF	CONSIGNEE					
3. ORDER NO.		4. REQUISITION/F	REFERENCE NO.	b. STREET A	DDRESS					
5. ISSUING OFF	ICE (Address correspond	dence to)		No. Organist Traba an	st 300000001000001			T 7 20700 T		
<u> </u>				c. CITY				d. STATE	e. ZIP C	ODE
		7. TO:		f. SHIP VIA						
a. NAME OF CO	NIRACIOR					8.	TYPE OF ORD	DER		
b. COMPANY NA	ME				URCHASE		Пр	DELIVERY	Evcent	for hilling
c. STREET ADD	RESS			REFERENCE			inst	ructions on the r	reverse, f	his delivery
					the following		ns and on	this side only led subject to	of this fo	orm and is
d. CITY		e. STATE f	ZIP CODE	order and or	ecified on bo n the attached very as indicate	d sheet, i	f any, con	ditions of the tract.		
9. ACCOUNTING	S AND APPROPRIATI	ON DATA		10. REQUISI	TIONING OF	FICE	-			· ·
11. BUSINESS C		eck appropriate box(es)) FHAN SMALL c.	DISADVANTAGED		N-OWNED		HUBZone	12. F.O.B. Po	TNIC	
☐ f. SERVIC	E-DISABLED	g. WOMEN-OWNE	D SMALL BUSINESS	(WOSB)			HOBZUTE			
VETERAN	N-OWNED 13. PLACE OF		R THE WOSB PROG				B. POINT ON	16. DISCOUN	IT TERM	s
a. INSPECTION		CEPTANCE				ORE (Date				-
9		47.0	CUEDULE (Occ		Daiantian	_1				
		17. 8	CHEDULE (See	ALL COLORS OF THE PARTY OF THE	QUANTITY	s)	UNIT		To	UANTITY
ITEM NO.		SUPPLIES OR SERVI	CES		ORDERED (c)	(d)	PRICE (e)	AMOUN (f)		CCEPTED (g)
	18. SHIPPING PO	INT	19. GROSS SHIPPII	NG WEIGHT	20. INVOI	CE NO.				
	Applications and Security Security Control of the Security Securit	P20/09/40	AND THE STREET WAS TRANSPORTED TO STREET AND STREET		Security Security Security Control	100 m 44 Miller APA 100 m 100				17(h) TOT.
SEE BILLING INSTRUCTION			21. MAIL INVO	CE TO:				\dashv	-	(Cont.
ON REVERSE	b. STREET ADDR	ESS (or P.O. Box)								
NEVENSE	c. CITY				d. STATE	e. ZIP C	ODE	\$		17(i
22.UNITED S					-1	23. NAM	E (Typed)			
AMER	RICA BY (Signatu	re)				TI	TLE: CONTRA	.CTING/ORDER	ING OF	FICER
						- 11				

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